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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,094	01/12/2001	Jens Baltersee	2-2-2	1665
46900	7590	03/07/2006	EXAMINER	
MENDELSON & ASSOCIATES, P.C. 1500 JOHN F. KENNEDY BLVD., SUITE 405 PHILADELPHIA, PA 19102			CORRIELUS, JEAN B	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/760,094

Applicant(s)

BALTERSEE ET AL.

Examiner

Jean B. Corielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-15,17,19,20 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-15,17,19,20 and 24-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***EXAMINER's Comment***

1. The applicant's decision not to follow the examiner's recommendation to place the application in better form for allowance, prosecution is reopened and a claim rejection and/or claim objection follows.

### ***Claim Objections***

2. Claims 13 and 20 are objected to because of the following informalities:

As per claim 13, if examiner suggestion is adopted with respect with 1, line 4 should be replaced by "as said first and second decorrelated signals".

As per claim 20, if the examiner suggestion is adopted with respect to claim 26, the limitations recited after "detector" up to the period, would be redundant and need to be deleted.

Appropriate correction is required.

### ***Specification***

3. The objection to the disclosure has been withdrawn.

### ***Drawings***

4. The drawings were received on 1/23/06. These drawings are acceptable.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5, 7-15, 17, 19-20, 24-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1, line 20, recites "based on the first decorrelated signal" however, it is unclear whether it is "the subtracting" or "the intermediate signal" that is based on the first decorrelated signal. For purpose of examination, it is assumed that "intermediate signal is based on the first decorrelated signal".

Similar comment applies to similar limitations recited in claims 26 and 29.

Claim 8, recites the limitation of "determining prior to step f) the real part of the interference reduced signal". Note that the interference reduce signal is generated in step f) it would be unclear however as to how to generate the real part of the interference reduced signal prior to the actual interference reduction.

Note that any claim whose base claim is rejected is likewise rejected.

6. Claims 1-5, 7-15, 17, 19-20, 24-31 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: Claim 1, lines 20-21, recite that the interference reduced signal is produced based on a first decorrelated signal. However, it is noted that there is no

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embodiment for such limitation as claimed. The specification and the drawing, see for instance the embodiment of fig. 3, show the interference reduced signal output of 131 generated based on a difference between a first correlation and a second correlation. As shown in fig. 3, the claim requires both the first and second correlation signals to provide the intermediate signal. Note that the embodiment of fig. 7 that shows an intermediate signal generated from a single correlated output requires that the correlated output is based on an "error signal" generated from the digitized signal. In other words, the embodiment of fig. 7 would require that the correlated signal be generated from a difference signal rather than the "actual digitized signal". In order to overcome this rejection, and to be consistent with the original disclosure, it is suggested that the claim be amended as suggested in the last office action in order to overcome this rejection. Note that if suggestion with respect to the base claim is adopted, the dependent claims should be amended so as to be consistent with the base claim

Similar comment applies to similar limitations recited in claims 26 and 29.

Note that any claim whose base claim is rejected is likewise rejected.

### ***Allowable Subject Matter***

7. Claims 1-5, 7-15, 17, 19, 20, 24-31 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

### ***Response to Arguments***

8. Applicant's arguments filed 1/23/06 have been fully considered but they are not persuasive. It is alleged that there is nothing inconsistent with "the intermediate signal is


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based on the first decorrelated signal". However it is noted that the claim reads on fig. 3 or 6 that requires that the intermediate signal be generated or based on "a first and second decorrelated signals". It is further alleged that claim 8 is ok and does need to be canceled however, it is noted that claim 8 is technologically incorrect as a real part can't be determined from the interference reduced signal in which the interference reduction is yet to be applied.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jean B Corrielus  
Primary Examiner  
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3-3-06